

## ILLUMINATED CAPS FOR CONTAINERS AND DISPLAY RACKS FOR ENERGIZING THEM

### Cross-Reference to Related Applications

5

This application claims benefit of the Provisional U.S. Patent Application entitled **Lighted Cap**, serial no. \_\_\_\_\_, which was mailed December 11, 2002, and filed as of December 27, 2002, by James R. Zarian, a copy of which is attached hereto for reference 10 purposes, the disclosure of which is also incorporated herein by reference.

### Background

15 Light forms for illumination have gained tremendous interest recently. LEDs (Light emitting diodes) as a light source have also been used extensively because of dazzling color, high flux, energy efficiency among other attributes. One of the more interesting attributes of LEDs is the compactness and small footprint.

20

### Summary of Invention

What is disclosed a cap for a container that comprises of a light source such as an LED, contained within the cap and conductors placed without the cap as depicted in Fig. 1.

U.S. Patent Application for ILLUMINATED CAPS  
FOR CONTAINERS AND SYSTEMS FOR ENERGIZING THEM  
Inventor: James R. Zarian

This embodiment attached to a container, then can be held in a holder capable of conducting current to the cap as depicted in Fig. 2.

5

The holder may have spring action, whereby once the cap is inserted into the holder, contact is made and the cap projects light into the contents of the container lighting the same.

10 The holder may also have a stem attached to it as depicted below as well as a base containing an energy source such as batteries, as shown in Fig. 3.

15 In another embodiment a holder may be provided as arranged as shown in Fig. 4.

20 The holder is provided with conductors and containers including the cap can slide from one portion of the holder to the next and fall into place at predetermined intervals. In such an arrangement a group of containers would be lit and as one container is removed, another container would fall into place and remain lit.

In certain arrangements the inclusion of an LED as the product is sold may be prohibitive or a large intensity of light may be needed.

U.S. Patent Application for ILLUMINATED CAPS  
FOR CONTAINERS AND SYSTEMS FOR ENERGIZING THEM  
Inventor: James R. Zarian

In such circumstances, the container(s) may be provided with a clear cap and light from an LED projected into the container as depicted in Fig. 5.

5 In one embodiment a series of LEDs may be arranged on a rack and the rack may also contain a guide to place the LEDs onto the caps illuminating the contents of the bottles as depicted in Fig. 6.